

REMARKS

Reconsideration of the above-identified application in view of the remarks following and the enclosed Affidavit is respectfully requested.

Claims 18-35 are in this case. Claims 18-35 have been rejected. New claim 36 has been added.

35 U.S.C. § 103(a) Rejections – Van Ryzin and Phan

The Examiner has rejected claims 18-19, 22, 25-27 and 30-35 under § U.S.C. 103(a) as being unpatentable over Van Ryzin (US Patent No. 6,131,130) and Phan (US Patent No. 6,064,437). The rejections of the Examiner are respectfully traversed.

Van Ryzin teaches a system which is intended to *converge* the personal computer with wireless home consumer electronics audio/video devices, as indicated by the title, "System for Convergence of a Personal Computer with Wireless Audio/Video Devices...". The system is clearly designed to permit the user to operate the A/V (audio/video) devices like TV and DVD from anywhere in the home, as stated in col. 2, lines 4-7: "It is yet another object of the present invention to provide a converged system having a common interface through which the homeowner operates the A/V devices from anywhere in the home".

It is very clear that the converged device of Van Ryzin does not divide a personal computer into two portions which are then separated and which communicate with each other remotely, but rather is attempting to provide a

system in which audio/video devices are communicating with a computer. This point is made very clearly with regard to Figures 7 and 8. The remote peripheral devices of Van Ryzin (mouse and keyboard) include a CPU; the presently claimed invention specifically *does not include* a CPU at the remote input platform. Applicant respectfully but strongly traverses the Examiner's statement that the keyboard and mouse actually lack a CPU, which such a component is clearly shown in Figures 7 and 8.

Applicant also respectfully but strongly traverses the Examiner's statement that the CPU of the peripheral devices of Van Ryzin is somehow not a CPU as described in the present application. Clearly, this CPU is intended to control the behavior of the peripheral devices to which it is connected. For example, the CPU is described as causing the position of the mouse to be displayed as a cursor on the wireless monitor (col 6, lines 44-50). Therefore, unlike the present invention, which lacks such a CPU at the remote input platform, the CPU at the mouse and keyboard of Van Ryzin does control those peripheral devices and also at least one additional peripheral device, that of the wireless monitor.

The Examiner does not provide any evidence for the assertion that the CPU of Van Ryzin falls within the category of processors which are not CPU's. On the contrary, Van Ryzin provides a great deal of evidence that this assertion is not consistent with the teachings of Van Ryzin. For example:

1. The term "CPU" is used to describe such a processor. This term is well known in the art; if Van Ryzin had wished to teach another type of processor, a different term would have been used.

2. The Examiner provides no support for the assertion that Van Ryzin's CPU does not include a control unit or an ALU, as Van Ryzin is silent as to whether these components are included. Since such components are typically included in a CPU as that term is known in the art, one of ordinary skill in the art would expect the CPU of Van Ryzin to include such components.

3. As described above, the CPU of the keyboard/mouse of Van Ryzin does control those peripherals and also at least one other peripheral device, that of the wireless monitor. Therefore, it clearly falls within the definition of "CPU" as described in the present application.

Furthermore, the personal computer is clearly shown as being connected to a video monitor that is acting as a television, in that it is described as being capable of displaying television programs (col 3, lines 32-36): "Wireless speakers/headphones 12 reproduce CD music, radio/TV and computer audio. Wireless video monitor 10 displays TV programs, DVD movies, Internet video feeds and CD multimedia". A television would actually require further adaptation in order to be able to act as the monitor for the personal computer, because computer monitors and televisions have different requirements in terms of the signal received and the processing of that signal. However, no further computer monitor is described, such that clearly the taught system is intended to use a television in place of the computer monitor.

In addition, the Examiner has described component 22 of Van Ryzin as a "local video card". In order for such a local video card to be equivalent to that of the present invention, it would need to be able to communicate PC VGA signals to a computer monitor. However, instead Van Ryzin teaches (col 4, lines 15-18), component 22 converts a "PC VGA signal from the VGA card of wireless computer 2" to a composite signal, which is the type of signal that is required by television sets. In fact, the VGA card of the wireless computer is clearly described as *not being in direct communication* with the wireless monitor, again unlike the present invention.

Applicant specifically traverses the rejection of the arguments in the Affidavit with regard to the identity of the wireless monitor as a television set, as the Examiner has failed to provide any evidence that such a monitor is not a television set. Merely being "operable connected to computer (14)" and displaying commands entered by a keyboard does not make a television set a computer monitor, since Van Ryzin clearly teaches the presence and use of elements which would be required to convert computer video signals to television video signals. Indeed, Applicant has pointed out numerous examples from Van Ryzin which indicate that the monitor *must be a television set* according to the teachings of Van Ryzin.

Thus, clearly Van Ryzin fails to teach many important aspects of the present invention, including the lack of a CPU at the remote keyboard/mouse, and also the importance of separating the computer monitor from the main computer. Furthermore, it is not only various aspects of the present invention

that Van Ryzin fails to teach; Van Ryzin actually teaches away from the present invention by emphasizing the importance of a "converged system" and of "convergence" between a personal computer and audio/video devices. Therefore, one of skill in the art would not look to Van Ryzin for guidance as to how to construct a divided personal computer, in which the remote input platform is separable from the main computer.

Phan fails to cure these deficiencies; indeed, the combination of the teachings of Phan and Van Ryzin would fail to provide the present invention.

Phan, like Van Ryzin, teaches the importance of the convergence of home computers with audio/video devices, in order to permit "multimedia content to [be] distributed from a host computer to various appliances throughout the home" (col 1, lines 18-22; word in brackets added for clarity). Phan seeks to accomplish such convergence through converting video data stored in a format suitable for a computer monitor (such as RGB) to a format that is suitable for a television set (such as NTSC compatible, interlaced video information); see for example col 4, lines 4-16. Indeed as Phan states in col 1, lines 47-49, "what is needed is a scheme for preprocessing the video information prior to presentation on the television screen". Thus, Phan is completely compatible with Van Ryzin, since both teach that computers should send video information to television sets, as part of "convergence" with home entertainment appliances; however, neither teaches that a computer monitor should be separate from the main part of the computer, as this configuration would not support the goal of convergence.

Figure 1 of Phan clearly supports the above statements: a host computer 12 (featuring a computer monitor) communicates to a remote television 16. Host computer 12 is clearly described as a personal computer. Component 14 of Phan is not a "main computer" but instead is a server, as it is clearly labeled in Figure 1. Furthermore, video compressor 22 of Phan is designed to be operative with television signals (YUV) and is intended to compress such *television signals* for transmission to television 16 (col 4, lines 35-45). Indeed, video compressor 22 receives such signals already converted from a video processor 20, which converts the RGB signals of the computer to the format of television signals.

Thus, the combination of Phan and Van Ryzin would clearly result in a system in which a remote computer sends compressed video signals to a television set. Indeed if the teachings of Van Ryzin and Phan did not both involve television sets, the combination would be inoperative, since Phan clearly teaches sending compressed video signals to a television set in the format of television signals; such signals would not be displayable by a computer monitor without additional conversion, which is neither taught nor suggested by Van Ryzin or Phan. In particular, if the assertion of the Examiner is accepted with regard to the identity of the wireless monitor of Van Ryzin, then the video compressor of Phan would be unable to communicate with the wireless monitor of Van Ryzin, as these two components would be operative with two different video signal systems.

The combined system of Van Ryzin and Phan is clearly different from the present invention, in which a main computer sends compressed video signals to a remote computer monitor. According to the present invention, a single computer is divided into two dependent, interlocking platforms, which only when combined together form a fully functional single computer.

On p.2 lines 9 – 22, the present application teaches that “A more useful solution would enable the consumer to view the display of the monitor of the computer and to interact with the computer anywhere in the house, as a remote application. Therefore, there is an unmet need for, and it would be highly useful to have, a device for remote display of information on a monitor and for remotely controlling a computer, as though the user was in physical proximity to the computer.”

The present invention fulfills a long felt need for computers that have been divided into dependent, interlocking pieces. At the time of filing of the application, no such idea existed. It would be very useful to be able to remotely interact with different parts of a single computer.

The Examiner has asserted that "long felt need" was not shown in the Affidavit. However, Applicant notes that products which fit the description of the claimed present invention are now being pursued by many companies, led by Microsoft, Viewsonic, Tatung, Fujitsu-Siemens, Sony and others. Obviously, such products take time to develop. Yet these products have only recently become available on the market, despite their popularity and rapid rate of sales. Therefore, the timing clearly indicates that the present invention

solved a need which was as yet unsolved at the time of filing of the present application, and is still in fact unsolved today. For example, the Smart Display™ (Microsoft Corp, USA) as well as Sony's AirBoard™ are not capable of displaying both text screens and streaming video, while the display of the present invention is capable of these functions. If the references cited by the Examiner were sufficient to solve the problem, then it clearly would have been solved much earlier, resulting in products that would have entered the market years ago. Furthermore, the clear market success of the previously described products, which are limited in functionality and do not provide the superior performance of the present invention, clearly indicates the presence of a long felt need, as computers themselves (in the desktop or "PC" version) have been widely used for years, long before the filing of the present application.

With regard to the Examiner's rejections, Applicant further wishes to respectfully note that the video expander of Phan (claim 25 of the present application) clearly differs from that of the present invention for the reasons described above; namely, the video signals of the present invention are those compatible with a computer and a computer monitor, while those of Phan are clearly compatible only with a television set.

While continuing to traverse the rejections of the Examiner, Applicant has also chosen to add new claim 36 to further clarify some important aspects of the present invention and to further expedite the prosecution. New claim 36 recites a detachable display device for supporting local and remote interaction by a user with a main computer. The ability of the display device to be

detached and separated from the main computer, while still remaining in communication with the main computer, is important for the present invention. The relative location of the display device to the main computer is less important than this ability, which provides flexibility for the operation of the present invention. None of the references teaches or suggests such flexibility. Support for new claim 36 can be found throughout the specification, particularly in original claim 1, and also at the bottom of page 7 bridging to the top of page 8.

35 U.S.C. § 103 Rejections – Van Ryzin, Yen, Phan and Hare

The Examiner has rejected claims 20, 21 and 23-24 under § U.S.C. 103 as being unpatentable over Van Ryzin in view of Yen. The Examiner has also rejected claims 28-29 over Van Ryzin and Phan in view of Hare (US Patent No. 6,084,638). The rejections of the Examiner are respectfully traversed.

The object of Van Ryzin is described above.

The object of Yen is the teaching of particular frequencies for transmission of signals to a television (reference number 1 is described in col 1, lines 59-66 as being a “TV”).

The object of Phan is as described above.

The object of Hare is the use of a microphone and joystick port with a remote television set.

Therefore, for the reasons given above, any combination of Van Ryzin, Yen, Hare and Phan would fail to teach or suggest the present invention,

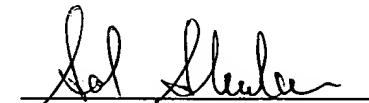
because such a combination would only be operable for transmission of television signals to a television set, and/or would otherwise only be operable with a television set, while the present invention is concerned with transmission of computer signals to a computer monitor.

Indeed, Applicant notes that the system of Hare has been described as being "strikingly similar" to that of the present invention; yet this system again requires the transmission of data to a television set, contrary to the teachings of the present invention, which uses a computer monitor.

Applicant further notes that as independent claims 18, 31, 35 and 36 are allowable, dependent claims 19-30 and 32-34 are also allowable.

In view of the above amendments and remarks it is respectfully submitted that claims 18 – 36 are now in condition for allowance. Prompt notice of allowance is respectfully and earnestly solicited.

Respectfully submitted,



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Date: September 11, 2003